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NEW DISCOVERIES ABOUT ANCIENT NARYN



Aida Abdykanova

Cultural Heritage and Humanities Unit's Research Paper #3

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The author: Aida Abdykanova

Abstract:

This research paper is one of the first publications to discuss the ancient layers of archaeological sites and artefacts that were discovered during the construction of the University of Central Asia's campus on Naryn river bank. The University of Central Asia (UCA) initiated the archaeological excavations in 2012, which revealed layers from the Mesolithic period – one of the most ancient periods in Central Asia. The discovery of these ancient sites has led to a scientific study of the technological and cultural evolution of the communities that used to live in the region during the Bronze Age. Of five archeological complexes, including two petroglyph complexes, Aigyrzhal-2 site is one of the most striking and represents the only evidence of the presence of ancient Mesolithic people in the entire Tien Shan range.

This publication has been developed as part of the Naryn Archeological Project (NAP), which has been implemented by the Cultural Heritage and Humanities Unit of the UCA's Graduate School of Development since 2017, with the aim to comprehensively research and preserve the ancient archaeological remains and artefacts at the UCA's campus site. The project also provides for the development of interdisciplinary cooperation with partner organizations, which includes both scientific research and the implementation of cultural heritage management mechanisms. This activity includes the foundation of museum collections, depositories, and training in the field-based schools format, the first of which was organized in 2018 in cooperation with the American University of Central Asia (AUCA) and Indiana University, Bloomington.

Keywords: archeology, cultural heritage, Central Asia

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Introduction

Despite more than a century of research, the ancient history of Kyrgyzstan is full of mysteries and riddles that still excite our imaginations, stimulating us to find out what took place in ancient times and what peoples inhabited this territory. Where did they come from and where did they go? It also inspires us to find out what has not yet been discovered by archeologists.

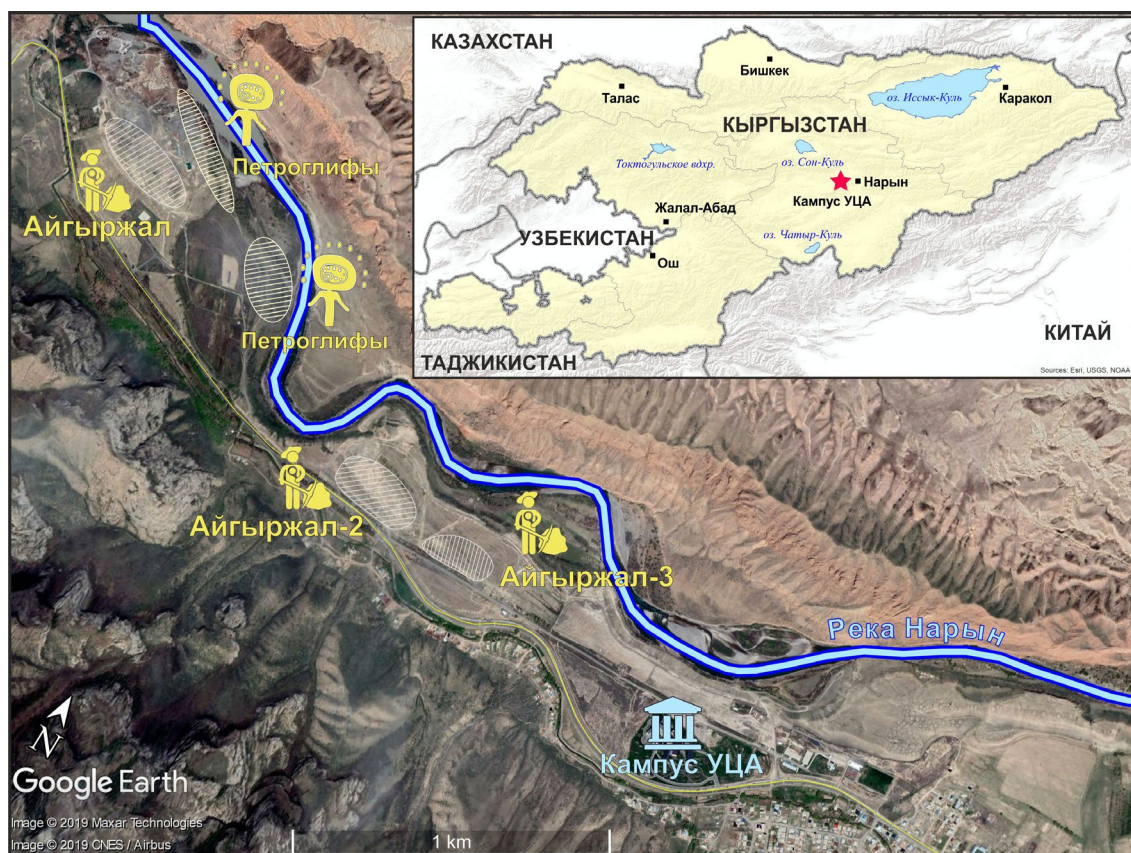
The territory of Kyrgyzstan has been inhabited since ancient times – from the Lower Paleolithic Stone Age onward. It was the birthplace of the Central Asian Neanderthals. Already in the Middle Paleolithic Age, the whole of Eurasia was inhabited by our direct ancestors - modern-looking humans (Sankararaman et al., 2012). For thousands of years, the climate changed slowly but surely, affecting vegetation, animals and people who had to adapt to the new environment. The unique cultures of the Mesolithic, Neolithic, Bronze Age, Central Asian Scythians – Sakas, Wusuns, ancient Turks and Sogdians, as well as many other peoples, were subsequently created. In the Middle Ages, the surroundings of Naryn were not as important as the banks of Talas or Chu rivers. The harsh climate did not favor the successful development of agriculture and the settling of people. However, the Naryn River Basin was of great importance in the lives of medieval nomads. The valleys of the At-Bashi and Arpa rivers served as winter sites for the Chagatai heirs. There was a route to Issyk-Kul from Uzgen through the valley of the Arpa River, and then through Naryn and the Barskoon Gorge, chosen by the great Emir Temir and his successors. Ulugbek, the grandson of Emir Temir, arranged seven military campaigns in the vicinity of Issyk-Kul Lake, hoping to conquer Moghulistan lands, and his army passed through Naryn. The life and activity of Muhammad Kyrgyz, the first known Kyrgyz leader in the history of Tien Shan, is also closely linked to this territory (Bartold, 1966).

Kyrgyzstan is a mountainous country, with the Tien Shan and Pamir mountain systems dominating its landscape, which contains submontane lowlands and glens, connected by narrow gorges and passes. These identify the natural boundaries of ancient cultures, forming a complex human interaction in antiquity. The narrow Naryn River valley is no exception. The place we call Naryn Valley or Basin is located in the Naryn middle reach ('Orto-Naryn' is translated from Kyrgyz as 'Middle Naryn'). The Naryn-Too Ridge flanks it in the south. Part of the ridge near the modern city of Naryn is known as Alamyshyk. If translated from Kyrgyz, 'ala' literally means motley or spotted, and 'myshyk' means cat. The name has stuck because the ridge here consists of limestone, granite and metamorphic shale rock, and is covered with coniferous forests on top, creating a diverse color scheme on the northern slope. The silhouette of a huge, motley cat that the ancient people once saw is clearly visible. The right bank in the middle reach is a badland-type of landscape (Shahgedanova, 2003). In geomorphology, this refers to dry relief with clay formations making a broken hilly ground. The badland on the right bank of the Naryn River is reddish, cut by the river in the lower part, and in its higher part it acquires a bizarre shape similar to the famous Colorado canyons due to the influence of wind and rainfall, contrasting strikingly against the northern slope of Alamyshyk, and creating the sensation of two different worlds merging but divided by the Naryn River. In geography, such places are called 'ecotones' or transition areas between two biomes. The availability of different resources makes ecotones convenient for both animals and humans (Odum, 1975).

The Naryn River, one of the main tributaries of the Syrdarya River, has attracted people and animals since ancient times, being a kind of vital artery; it runs through mountains to the northwest - to the Fergana Valley. There are several opinions regarding the origin of the river's name. The word 'naryn' is considered to be of Mongolian origin. The first interpretation of the word 'narin' ('narin' in Buryat and Dagestani, 'nern' in Kalmyk, 'naryn' in Khalkha) is 'narrow, flexible, thin, willowy.' If you look at the narrow, winding ribbon of the Naryn River and the willowy banks, you can understand why the river earned this name. Another interpretation of 'naran' or 'narin' ('narn' in Kalmak, 'naran' in Dagestani, 'nar(an)' in Khalkhas) is 'the sun' (Etymological Dictionary..., 2016).

The modern city of Naryn is located along the steep left bank of the river, at the site of the Naryn fortification, established by the Russian Empire in 1868. Some log buildings of the first settled citizens and military garrison barracks have survived inside the city to this day. One of the barracks is currently operated by the city clinic. The second building is located in the Border Service compound. Other buildings are located along the streets of At-Bashi, Chanachev and Kachkynov. The choice of the garrison location was deliberate, despite the harsh climatic conditions. The main tasks of the garrison were to control and ensure security of the bridge over the river located on the most important caravan route from Kashgar to Semirechye. Later on, Narynskaya Slobodka ('slobodka' refers to an urban-type settlement in Imperial Russia) appeared which was originally of a purely commercial character. In 1887, N. L. Zeland in his travelogue informs that around 150 soldiers and Cossacks were on duty in the fortification; while about 300 Sarts and Tatars were engaged in trade in the city (Zeland, 1888). In 1927, during Soviet times, Naryn was awarded the official status of a city and became a regional center in 1938.

The systematic study of archaeological sites in the vicinity of Naryn started in 2012 with the beginning of the UCA campus's construction, in Ak-Kyia to the west of the city, during which traces of ancient human activity were discovered. Professor Kubat Tabaldiev was invited to supervise archeologists from various fields in the study of the discovered archeological sites. Later on, foreign archeologists, geologists, geomorphologists, paleobotanists and anthropologists joined the research, each of whom contributed to the study of these sites.



Picture 1. The location of 'Aigyrzhal-1' and 'Aigyrzhal-2 & 3' on UCA campus in Naryn.
 Made by E. Shibkov.

The First People

Almost all well-known archeological sites in the vicinity of Naryn were discovered to the west of the city, along the smooth slopes on the left bank of the Naryn River, where people and animals could get easy access to water. However, the city itself is situated on the steep banks of the river. Therefore, many sites have not been ruined by people and have survived to this day.

Originally, the Naryn basin was inhabited in the middle and upper Paleolithic period. The earliest discoveries from here are simple pebble tools – pebble choppers and chopping tools – in the Ottuk Valley, near the ancient On Archa River, which were found in 1954 by the archeologist A.P. Okladnikov (History of Kyrgyz SSR..., 1984). Presumably, the first man to appear in the Central Tien Shan was a Neanderthal. Neanderthals, who were native Eurasians and lived here in the period from 400 until 30,000 years ago, had a larger population and were better adapted to the cold climate than modern humans, and lived in today's Europe, the Middle East, Central Asia and the Altai (Krause, 2007).

We have more reliable data on the next epoch of the Stone Age - the Mesolithic or Epipaleolithic period. This age covers the transition period from the Pleistocene to the Holocene epoch. Geologists consider the latter to be one of the interglacial periods.

In 2012, after an excavation of the Semetey Grotto on the way to Bishkek from Arpa Valley, I visited my teacher, Professor Kubat Tabaldiev (Manas Kyrgyz-Turkish University). He had previously carried out archeological works on Aigyrzhal-2 site in the vicinity of Naryn. He told me by phone that he had discovered something interesting. Upon my arrival, we went to have a look at the Aigyrzhal-2 site where I saw a rather small extended upland on the bank of the Naryn River, which could be considered a relic of the river terrace.



Picture 2. View of Aigyrzhal, Aigyrzhal-2, Aigyrzhal-3 sites.
Photo by Y. Hayakawa.

Despite the fact that the hill had been partially destroyed, the southern part, closer to the road, was almost completely excavated by road builders, in order to reach the pebbles. This allowed us to see the stratigraphy of the monument site, which at first glance consisted of three horizons: the top of the loess (a high-quality clay), and below, under the loess; sandy loam; and pebbles. The last horizon was the most powerful and consisted of both pebbles and huge boulders. Examining the stratigraphy, we walked along the ruined part and, unexpectedly, among the rocks, found a mealing stone similar to those used by people from the Neolithic Age and up to the early Iron Age. These mealing stones looked like large flattened stones, sometimes boat-shaped with a polished concaved working surface. Mealing stones always come with a pounder or a pestle. The latter tools are often oblong, round or cylindrical stones in diameter. Ancient people milled the first cereals on these mealing stones. Professor Tabaldiev was surprised to find this artefact, and told me that the whole hill is a time-

transgressive burial ground. There are also graves from the Bronze Age, concentrated in the western part of the hill. The discovery of the mealing stone proved that this location was both a burial ground, and a settlement where people might have lived during the Bronze Age.

The site (the whole hill was one big complex) made an indelible impression. The wind moved the sagebrush, so it was easy to breathe, and the surroundings were peaceful and silent. Despite its small size – 300 meters by 100 meters - when you stand on the top of the hill, you feel peace, freedom and the infinitude of the place. When Lithuanian paleobotanist Dr. Gedre Motuzaite-Motuzavičiūtė (Vilnius University) first climbed the hill a year later, she observed it with admiration and said it would be a great place to die.

Kubat Tabaldiev found flint, chalcedony and a lot of porcellanite microblades. Porcelain is a natural material that appears as a result of the natural burning of good quality clays. Almost all of the stones were grayish white and were clearly visible on the surface. Somewhere underneath this thick soil, there was a cultural layer with the stone artefacts, which I would later find. The microblades were extremely small - only five millimeters in diameter, in contrast to the massive blades and microblades of the Semetey Grotto. We already know the radiocarbon dates for the Semetey blades which were around 6,000 years ago. Therefore, using a common linear approach to historical interpretation, I decided that Aigyrzhal microblades appeared later than the Semetey Grotto blades and that they thus belong to the Neolithic Age.

A few days later, I returned to Naryn, where we started to make test pits to search for a layer with stone artefacts. We found a hearth and stone artefacts in the sandy loam layer of the first pit, just over one-meter deep. Charcoal and stone tools were also found in other pits. At the same time, we carried out an excavation of the mounds. Some of them were embedded into the Stone Age layer. Field researchers found microblades and brought them to me, and it became clear that the Stone Age site was large, which is not entirely typical for this period.

Natural changes due to global warming some 19,000 years ago began to slowly affect the environment. Approximately 17,500 years ago, the average temperature increased by 0.3°C which made living uncomfortable. The difference in average temperature between the last glacial maximum (19,000–23,000 years ago) and the Holocene age is about 10°C. Excavation findings in Aigyrzhal-2 provide evidence that people first settled in this place around 13,700 years ago and lived here until up to 13,100 years ago (Abdykanova et al., 2014). Between 12,000 and 14,000 years ago, the Earth was undergoing the Bölling and Allerod warming (Shakun, 2012). Temperatures had risen to nearly modern levels, the sea level had risen by more than 100 meters, there had been intensive glacier melting, and many northern territories and mountain ranges, including the Central Tien Shan, had become accessible to humans again. Late Paleolithic hunters and gatherers, and creators of Madeleine, Epigravette and Perigord cultures lived in Europe at that time. The Middle East was inhabited by the tribes of the Epipaleolithic Natufian culture, who collected wild grains; and the Naryn River valley, judging by the stone artefacts, was inhabited by representatives of the Obishir culture, local Epipaleolitans. Before Aigyrzhal-2 was discovered, the region's Epipaleolithic age dated back 7,300-10,500 years (Schneider, 2015). Ancient Naryn citizens made microblades from prismatic cores and cured skins with tiny scrapers, and used them to make composite tools and arrowheads; they wore decorations

from animal fangs, practiced phallic cult, and were so successful in hunting that all game in their vicinity during the 600 years of their settling were exterminated.

So why is this period referred to as the Epipaleolithic age and not the Mesolithic? Scientific terminology is created by people, and in this regard archeology is no exception. In other words, there is no clear answer to this question. At different times, different researchers have used these terms in different senses. In general, there are two common meanings of these terms. The word 'Mesolithic' appeared first and applied mainly to Europe, which was almost completely inhabited by people from the Middle East and dominated their culture



Picture 3. Aigyrzhal-2. Pendant from wild sheep or ibex fang. Epipaleolithic.
Photo by S. Durusbekov.

around 6,000 years ago. Therefore, the term 'Mesolithic' was associated with an incoming population. Mesolithic in the Middle East, rooted in the Paleolithic, was called the Epipaleolithic. The essence of the second definition is that at a later time, the Epipaleolithic became associated with traditional societies who were hunters and gatherers; and the Mesolithic became linked with the same societies, with more developed tendencies regarding the domestication of animals and plants. However, it is hard to agree with the second definition.

Regarding the Mesolithic in Central Asia, and given its genetic connection with the local upper Palaeolithic (Kolobova et al., 2013), it can be named the Epipalaeolithic (i.e., the Mesolithic that originates from the local Palaeolithic) with episodic Middle Eastern cultural influence starting 15,000 years ago (according to data from Tajikistan) (Schneider, 2015). This means that the local population occasionally mixed genetically with the incoming population from the Middle East, and adopted some of their cultural elements in the form of geometric microlites. At the same time, the Mesolithic/Epipaleolithic is represented by at least three different cultures in the region: Obishir, Tutkaul, and Trialet.

Another important detail here is the microblade knapping, which appeared in Mongolia between 18,000-25,000 years ago, and aligns with the general climate cooling and aridization, being a consequence of the last glacial maximum. The appearance of microblades means humans adapted to the new conditions. In other words, they left their caves and grottoes to go to open spaces; and their hunting strategy changed radically as they needed lighter and possibly longer-range weapons to successfully hunt mobile and small game (Krivoshapkin et al., 2009).

The origin of Aigyrzhal inhabitants in the Epipaleolithic remains unclear. It has been said that they appeared suddenly and then disappeared similarly quickly. However, this is certainly not the case. It

is most likely that climate change and the reduction in the number of animals forced them to move to other more hospitable lands. Similar to the features of Obishir-1 and Obishir-5 sites, and, perhaps, including Tash-Kumyr, some Aigyrzhal descendants became settled in the mountain slopes in the Fergana Valley. The evidence supporting this idea is that Aigyrzhal people inhabited Naryn during the time at which it had its most favorable climate.

Neolithic?

To the west of Aigyrzhal-2 there are remains of a hill called Aigyrzhal with Hunnish and Middle Age mounds. Aigyrzhal-3 site is adjacent to Aigyrzhal-2 in the east. Both sites are gentle hills stretching transversally; but one is higher than the other. The hills were partially leveled out during Soviet times. However, in 2013, the archeologist Oroz Soltobayev, who has a unique intuition in finding archeological sites, on the surface saw a stone protruding from the ground. Soltobayev also noticed other stones and understood the need for this terrain to be cleared. Later, students removed the soil by about half the depth of a shovel blade, which released the other stones. The stones, when placed together, made fences. In Central Asia, fences belong to the Bronze Age and the Turkic era, and these fundamentally differ from each other. Bronze Age fencing consists of a visible grave part, whereas Turkic fencing contains a visible mortuary part.

The discovered fences in Aigyrzhal-3 belonged to the Bronze Age. Some were small, some were big, and all were tied together, and almost all tombs appeared to be for children. The burial ground is still under study. In 2014, my colleague from Japan, Shogo Kume (Tokyo University of Arts), who worked at the site with my colleagues Oroz Soltobaev (Kyrgyz National University) and Emil Sultanov (Institute of History, Archaeology and Ethnology of the National Academy of Sciences of the Kyrgyz Republic), told me that during the excavations of one of the central fences, he found burning and coal traces on the walls. Therefore, in 2015, I made several pits and cleaned the walls of the excavated fences. Stratigraphy showed that below the burial ground, the site had a Bronze Age inhabiting layer, and another lower layer dating back 10,000-11,000 years. The only way to clarify the period in which this was inhabited would be to find out who lived there. Such a layer has not been found at Aigyrzhal-2 site.

The Eneolithic Period and the Bronze Age

In the early years of the research, we clearly saw that there were Bronze Age layers after the Epipaleolithic period, which prompted some logical questions. For instance, why is there such a big time gap (10,000 years) between two Epipaleolithic and Bronze Age inhabited layers of the Aigyrzhal-2 site? It became necessary to find out whether this time gap was real and, if so, why. Given that the site was used by people until the Middle Ages as a place to live, through the Bronze Age and possibly the Early Iron Age and later as a place for rituals and burials, we can say that the gradual change in the function of the site began in the Bronze Age.

But what happened between the Epipaleolithic Age and the Bronze Age? Such a big gap in which there is an absence of traces of human activity cannot be only explained by climate change. This gap

is due to the fact that detailed climate reconstructions for Central Asia have not been undertaken. The climate in antiquity always consisted of numerous microclimates, as it does now. Therefore, the available reconstructions of other regions cannot be fully applied to this region. Moreover, even in the Holocene age the climate was quite variable. Cooling, aridity and other climatic factors that negatively affected the life of ancient people did not last long enough to explain the situation with regard to Aigyrzhal-2.

In the summer of 2016, we continued excavations in the area of pit No. 1 in the eastern part of the Aigyrzhal-2 site. Then, our small AUCA team was joined by: Yegor Kitov, a physical anthropologist from Moscow; his teacher Alexander Khokhlov; an archaeologist from Novosibirsk, Svetlana Schneider (Institute of Archeology and Ethnography SB RAS); a specialist in the study of the Mesolithic in Central Asia; and a student from Kyrgyzstan, Saltanat Alisher kyzy (a graduate student of the Humanitarian Institute of NSU). Yegor Kitov, together with Alexander Khokhlov, were busy processing anthropological materials, obtained as a result of excavations of more than 80 burial mounds on the Aigyrzhal-2 site by a team of archaeologists including Kubat Tabaldiev in 2012-2014. Svetlana Schneider took metric characteristics of a collection of stone tools. Meanwhile, Saltanat Alisher kyzy and Basira Mir Mahamad (an AUCA student and my main assistant) discovered a wall curve on the site in nine squares.



Picture 4. Aigyrzhal-2. Measurements of the discovered section of the wall in 2016.
Photo by A. Abdykanova.



Picture 5. Aigyrzhal-2 and the excavation site in 2016.
Photo by A. Abdykanova.

Svetlana and I looked confusedly at this clear picture of clay on a sandy loam up to one meter wide and three meters long. The remaining field days were to be devoted to the study of the wall. Over time, it became clear that the wall begins higher in the loessial horizon, and ends in the sandy loam, just below the first Epipaleolithic layer, with the base of the clay wall lined with small pebbles.

In 2012, when laying pits, I carefully looked at each unusual piece of clay against the background of the sandy loam, endeavoring not to miss a hint of brick or other architectural detail. Previously, in the summer of 2011, after visiting the Neolithic settlement of Goy Tepe in Azerbaijan, I saw clay rolls - prototypes of bricks - with which the Goitepins built their dwellings. Monuments made with the remnants of dwellings are not so rare, so the likelihood of clay structures being found on Aygyrzhal-2, given the excess and excellent quality of local clay, as well as the large size of the settlement, was high.

And in 2016 the first a piece of the wall appeared, followed by round pits or structures with a diameter of up to a meter. Inside, they consisted of compact clay and rare pebbles, which indicated that these were indeed structures, and not the creation of nature. The structures were clearly separated from the first Epipaleolithic layer, which they passed through, but it was difficult to date them. Ritual pits filled with ceramics, coal and ocher were discovered on the wall's surface. According to radiocarbon dating, the pits are attributed to the Middle and Late Bronze Age. The wall and pits were created between the Bronze Age and the Epipaleolithic period. It would seem that this would be the long-awaited filling of the gap in the chronology of the site, but it was still necessary to date these structures. In 2018, Svetlana Schneider came to an agreement with the geographer and geomorphologist Redjep Kurbanov (Institute of Geography of RAS) from Moscow about the dating of the clay and pebble samples by using the optically stimulated luminescence (OSL) method. As a result, we obtained a series of dates within the range of 4,000-5,000 years ago for the wall and pits, which fits perfectly into the framework of the Eneolithic/Early Bronze Age. On the territory of Kyrgyzstan, no reliable sites of the Eneolithic/Early Bronze Age had been found until then, apart from some elements of rock art, which are generally difficult to date.

At the same time, we received long-awaited radiocarbon dates from Yegor Kitov (Institute of Ethnology and Anthropology of RAS) for two burial grounds (Nos. 67 and 67a), where the anthropological appearance of the buried and the archaeological context is different from the burial grounds of the Bronze Age of the Andronovo culture. The dates indicated 2200-1900 years BC (about 4,000 years ago). According to modern chronology, the dates are within the Middle Bronze Age (2500–1800 BC). The Andronovo people were generally strong, powerfully built, light-eyed, fair-haired Europeans with short heads and wide faces (the Andronovo version of the protoeuropeoid type) and lived in the vast Eurasia, according to new data, during the period from 1800 to 1500 BC (Jia et al., 2017).

The Aigyrzhal people, who lived in Naryn in 2200–1900 BC, turned out to be asthenically-built, swarthy brunettes with long heads and narrow faces and a sharper contoured profile; they looked like a modern Mediterranean. Anthropologists attribute these features to one of the variants of the South Europeoid type, since this type comes from the south of Eurasia (Kitov, 2015).



Picture 6. Aigyrzhal-2. The skull from burial mound number 67a. The Early Bronze Age. Photo by Y. Kitov.

The Eneolithic period and the Bronze Age of Eurasia, including Central Asia, entail a complex map of various societies. In the Eneolithic age, the area from the Urals to the Yenisei was populated by protoeuropeoid newcomers (Pit Grave culture in Eastern Europe and Afanasyev culture in the Minusinsk Basin) from the west, which became mixed with local neo-Eneolithic (Uraloid type with an element of Mongoloid type) (Kitov, 2015). On the basis of mixed populations in Western Siberia (Debets, 1948), or because of a new wave of migration from the southern regions, possibly from Central Asia (Gerasimov, 1955), the Andronovo people then arrived in the Eurasian steppes.

Central Asia at that time was in a zone of resettlement of the two main anthropological types: protoeuropeoid from the west and from the north, and south-European (Mediterranean) from the southwest. Therefore, Eneolithic cultures like Afanasyev (Siberia) and Pit Grave (Eastern Europe), with a relatively high number of common Europeoid elements, are similar to each other, whereas Srubnaya and Andronovo culture (Fedorovo) and later Alakul culture all had elements of the south Europeoid type in different regards (Solodovnikov, 2014).

In terms of anthropological type, territory and time, representatives of the Bactrian-Margian archaeological complex who lived in the territory of ancient Margush (Margiana) (modern-day eastern Turkmenistan, northern Afghanistan, western Tajikistan and southern Uzbekistan) in the years 2300–1800 BC, forming settlements in small oases surrounded by steppe and the mountain pastoral population, are the closest to the two peoples from Naryn (Sarianidi, 2005; Klein, 2007; Dubova et al., 2017). The burial posture, crouched on the right side, with the head to the north, also coincides. Given the developed architecture of the ancient Bactro-Margian people, it is possible that the walls and the pits in Aigyrzhal were built by them, as they had once come from the south of Central Asia. But there is no archaeological inventory beside the buried, only two pebbles with ocher spots were found, rendering our comparison incomplete.

At the same time, there is an opinion that the long-headed, narrow-faced Europeoid type (the variant of the south Europeoid type, which is similar to the ancient Aigyrzhal people and the ancient Bactro-Margian people) belonged to the pre-Andronovo local population (Dremov, 1997; Kiryushin, Solodovnikov, 2010). In this case, some connections with Eneolithic Afanasyev culture are possible, especially since ocher is present at their burial sites (Khokhlov et al., 2016). It is most likely that these are not direct connections, but rather intermediate and transitional ones or genetically ascending to one ancestor.

The DNA of two buried people from kurgans #67 and #67a of Aigyrzhal-2 site were revealed in a recently-published article on the genetics of Eneolithic and Bronze Age populations on the territory of Southern and Central Asia. According to the results, these buried people were genetically linked to the people of the Botai culture in Eneolithic of Kazakhstan (Narasimhan et al., 2019). But the physical type of the buried people from Aigyrzhal-2 site was not similar to the physical type of the ancient Botai people. This is another mystery that will require further research if it is to be solved.

The Andronovo people came to the territory of Tien Shan later, at the beginning of the late Bronze Age. By 1800–1500 BC, their sites had already been found in Xinjiang, in the Tien Shan and Pamir. Andronovo sites of the Bronze Age in Aigyrzhal-2 are dated from 1881 to 1426 BC (Motuzaitė-Motuzavichute et al., 2015).

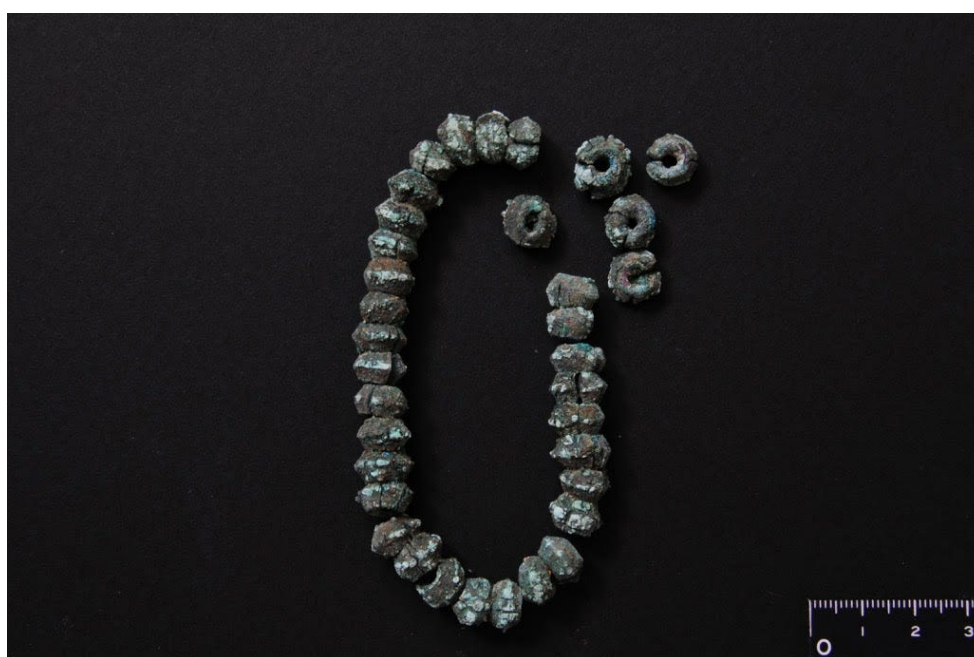
The burial mounds of Aigyrzhal-3 are dated from the period between 1745 and 1565 BC. It becomes clear that the Aigyrzhal people came here as a result of a migration wave from the vastness of Eurasia, populating, assimilating and possibly pushing out carriers of other cultures.



Picture 7. Aigyrzhal-3. Child burial. The Bronze Age.
Photo by Sh. Kume.

It was traditionally believed that the territory that makes up modern Kyrgyzstan was only inhabited from the late period of the Bronze Age, the end of the Fedorovo-Alakul stage (Bernshtam, 1952; Kozhemyako, 1960; Kozhombardiev, Kuzmina, 1980; Galochkina, 1977; Zima, 1982; Kuzmina, 1986). This chronology was based on a typology of artefacts which did not go further back than 1200 BC. Later, the archaeologist Orozbek Soltobaev presented dates of 1600-1900 BC for the construction of these artefacts based on the findings of the Bronze Age from the Aigyrzhal-2 burial mounds (Soltobaev, Moskalev, 2013).

Another archaeologist Emil Sultanov dates the Aigyrzhal-3 in the years 1200–1000 BC and some items made of bronze between 1400 and 1000 BC (Sultanov, 2015).



Picture 8. Aigyrzhal-3. Bracelet made of bronze beads. Bronze Age.
Photo by Sh. Kume.

Given the fact that a series of radiocarbon dates from the Bronze Age of both sites is synchronous to the beginning of the Andronovo (Fedorovo) culture, a revision of the published earlier archaeological materials and publication of new data on the Bronze Age of Naryn are necessary.

An Inconclusive Conclusion

One can write a lot and for a long time about the sites of Naryn; and to study them requires even more time. Nevertheless, the results of the archaeological activities from 2012 to 2018, reflected in reports and some publications, are already impressive. The complex nature of the sites with an interdisciplinary research approach can help to revise the existing historical concepts and significantly expand our understanding of the region's past.

This publication considers only the most ancient strata of the history of Naryn. The history of later periods should be described in a separate work.

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Glossary

Archaeological inventory – a set of artifacts.

Andronovo culture – the general name of the group of archaeological cultures of the Bronze Age in Western Siberia, the Urals, Kazakhstan, the Tien Shan and Xinjiang.

Afanasievo culture – archaeological culture of the Bronze Age in Southern Siberia.

Burn – trace in the ground resulting from long exposure to fire.

Chalcedony – translucent mineral, cryptocrystalline fine-fibrous variety of quartz.

Cultural layer – a lithological layer with artifacts and traces of human activity.

Climate aridization – a set of processes to reduce the degree of moisture, which causes a decrease in the biological productivity of ecosystems by reducing the difference between precipitation and evaporation.

Ecotone – transitional zones between bioms.

Eneolithic – Copper Stone Age.

Epigravettian – Upper Paleolithic culture of Eastern Europe.

Epipaleolithic – a type of Mesolithic Age.

Fedorovo-Alakul stage – local variants of Andronovo culture during the Late Bronze Age on the territory of Siberia, Ural, Kazakhstan and Tian-Shan.

Geomorphologist – a specialist studying the science of relief, its appearance, origin, development history, modern dynamics and patterns of geographical distribution.

Holocene – modern climatic epoch.

Loess horizon – a horizon of non-layered, homogeneous calcareous sedimentary rock of light yellow or fawn color.

Magdalenian culture – Late Paleolithic culture of Western Europe.

Mesolithic – Middle Stone Age.

Microblade – used in Stone Age archaeology: a tool or spall with parallel longitudinal edges, obtained by the knapping of a stone core with width is less than seven mm. It was made by using striking or pressure technique.

Natufian culture – Epipaleolithic culture of the Levant.

Neolithic – New Stone Age.

Nucleus – core, fragment of rock at the stage of primary reduction in production of stone tools.

Obishir culture – Epipaleolithic culture of Tian Shan, Fergana and Pamir-Alay.

Optically stimulated luminescence (OSL-dating) – physical dating method based on determining the time when the mineral was last exposed to sunlight.

Ocher – natural pigment consisting of iron oxide hydrate mixed with clay.

Paleolithic – Old Stone Age.

Pit Grave culture (Yamnaya) – Eneolithic and Bronze Age culture.

Pebble – small pellets, pebbles, and rock fragments rounded to varying degrees under the influence of wind or water with a diameter of one to 15 centimeters.

Perigor – Upper Paleolithic culture of France.

Pestle – tool for crushing, grinding or crushing something in a mortar.

Pleistocene – first epoch of the Quaternary Period.

Porcelanite – natural porcelain.

Radiocarbon dating – a type of radioisotope dating used to determine the age of biological remains, objects and materials of biological origin by measuring the content of the radioactive isotope ^{14}C in the material with respect to stable carbon isotopes.

Remnant – in geology: isolated rock mass, which remained after the destruction of the more unstable rock surrounding it by any exogenous factors - weathering, erosion, exposure to water, etc.

Stratigraphy – study, section of geology, on the determination of the relative geological age of layered sedimentary and volcanic rocks, the separation of rock strata and the correlation of various geological formations.

Srubnaya culture – Late Bronze Age culture of Eastern Europe.

Sandy loam – loose rock or soil, consisting mainly of sand and dust particles with the addition of about 3-10% silt, pelitic or clay particles.

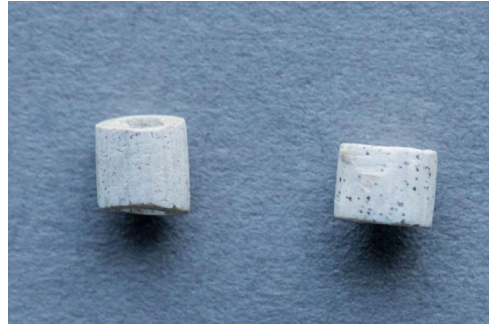
Tutkaul – ancient settlement in Southern Tajikistan dated back to Eneolithic and Neolithic Ages.

Trialet – Upper Paleolithic and Epipaleolithic culture on the territory south-west from the Caspian Sea.

Test pit – testing and small excavation area in archaeology.



Picture 9. Golden bead. The Hunnic Period.
Photo by S. Durusbekov.



Picture 10. Stone bead. Bronze Age.
Photo by S. Durusbekov.



Picture 11. Prismatic core. Aigyrzhal-2, Epipaleolithic. Photo by S. Durusbekov.



Picture 12. Bronze knife. Bronze Age. Photo by S. Durusbekov.

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